UPDATE

News from the AFIPS Washington Report

Supreme Court denies CBCT petitions; Comptroller of the Currency to issue new CBCT regulations

Consolidated petitions from two Chicago banks and the Comptroller of the Currency, seeking review of federal appeals court regulations, which equate customer-bank communications terminals (CBCT's) with bank branches, and thus forbid CBCT's in nonbranching states, were denied by the Supreme Court last month "without dissent or explanation."

Banks' response. The petitioning banks, Continental National Bank Trust Co. of Chicago and the First National Bank of Chicago, this month deactivated their combined total of seven CBCT’s. The terminals’ three uses permit deposits to be made, funds to be transferred, or funds to be borrowed; each of these functions, various appeals courts have held, constitute branch banking under the National Bank (McFadden) Act.

New CBCT regulations. The Currency Comptroller's attorney Edward Jiran told AFIPS Washington Report in October that the comptroller will issue new regulations for national bank CBCT's this month.

Rules may be written to liberalize minimum capitalization requirements for terminals shared by more than one financial institution, according to Claude A. Raworth, chief of the Comptroller's Electronic Banking Systems Division. Raworth told AFIPS that the new regulations will permit banks “to use the [EFTS] technology without heavy capitalization requirements [whereas]... some thinly capitalized shops would otherwise have problems.” Thus, according to the Currency Comptroller official, the regulations would encourage sharing EFTS facilities with smaller banks.

NCEFT and legislative activities. Prior to the Supreme Court action denying the CBCT petitions, National Commission on Electronic Funds Transfer (NCEFT) executive director John B. Benton told the AFIPS Washington office that the branching issue should be resolved in the U.S. Congress. Benton added that “it’s going to be some time before legislation is passed in Congress” on whether CBCT’s are branches.

Last month, the NCEFT convened hearings on both branching and consumer issues. The Senate Subcommittee on Financial Institutions, chaired by Sen. Thomas J. McIntyre (D-N.H.), will hold hearings on the branching question this month.

CBCT court action. Federal courts have been almost unanimous in their interpretation of the McFadden Act disallowing off-premises CBCT's. Last August, the U.S. Court of Appeals for the Tenth Circuit, ruling on a Colorado case, upheld a lower district court judgment that receipt of deposits by CBCT’s violates the McFadden Act. However, the federal appeals court reversed the district court's finding that the use of CBCT's for withdrawal of funds or transfer of funds is in violation of the act.

The U.S. Court of Appeals for the Eighth Circuit, in a Missouri case last July, upheld a district court ruling in Missouri that the First National Bank in St. Louis must remove CBCT's at two St. Louis County locations. The district court had held that Missouri law does not permit a state bank to operate such facilities outside the county in which its principal banking house is located. (First National's main office is in the City of St. Louis, not considered part of St. Louis County.) In addition, the court said that any one of the three major services provided by CBCT's constituted branch banking, which is limited in Missouri.

In the cases of the two petitioning Chicago banks, decided by the federal court of appeals in Illinois last May, all functions performed by CBCT's were deemed to constitute branch banking, which is forbidden in Illinois. However, a federal district court in Oklahoma approved all three uses of CBCT's, finding terminals "only processors," and as such legal. An appeal of the case was mooted when the state legislature authorized legislation sanctioning the use of CBCT's.

Government Operations Committee criticizes noncompetitive procurements

Following hearings last June (see Computer, September 1976, p. 3) the House Committee on Government Operations stated in October that "the low level of fully competitive ADP procurements, coupled with the apparent lack of effective utilization of ADP resources will, if allowed to continue, ultimately result in seriously jeopardizing the effectiveness of the Brooks Act [P.L. 89-306], at a cost of millions of dollars annual to the taxpayers."

Reexamination of "true impact of computers" suggested. In a report, titled Administration of P.L. 89-306, Procurement of ADP Resources By the Federal Government, * the committee said, "If the full benefits of the Act are to be achieved, GSA, OMB, NBS, and the user agencies must join together in a commitment to fully support and adhere to the provisions of the Act .”

The report suggested a reexamination of "the true impact of computers on government operations." It raised the question of whether "acquisition of ADP resources is neces-

*Available from the AFIPS Washington Office, 2100 L Street NW, Washington, DC 20037.
necessary to carry on an essential program, or whether such acquisition will foster non-essential activity because the computer is available."

ADP "must . . . receive attention of top management." The committee concluded that ADP "can no longer be viewed as a mere tool, but must now be treated in the same way as other major programs and, as such, receive top attention of top management." The report attributed the basic causes of noncompetitive procurements to a lack of (1) adequate justifications for ADP acquisition (2) long-range planning, (3) standards, (4) high level languages, (5) utilization reviews, and (6) use of functional specifications.

OMB directs GSA to use functional ADP specifications. Responding directly to the committee report and other criticisms, OMB director James T. Lynn, in a letter last month to GSA administrator Jack Eckerd, wrote that "to preclude the adverse effects of unduly restrictive specifications, agencies shall, to the maximum practical extent, express their ADP requirements in terms of functional performance specifications rather than equipment specifications.

"GSA should strive for expeditious review of agency submissions to avoid delays in the procurement process. Agencies should cooperate with GSA to expedite these reviews. An undue length of time for the normal ADP procurement process may be considered a disagreement by GSA with the request of the agency, and may be appealed to the Director of the Office of Management and Budget," Lynn added.

"Consistent with the policy expressed herein, any such appeal will be handled expeditiously, but the burden will be upon the agency to demonstrate the need to specify the particular make or model of equipment or its functional equivalent when such specification is at issue," he said. The GSA has 60 days from October 6, the date of the letter, to comply with the directive.

House Communications Subcommittee chairman recommends overhaul of 1934 communications act

A "basement-to-attic" overhaul of the 1934 Federal Communications Act, the statute which provides the basis for regulation of the nation's telecommunications systems, was proposed last month to the next Congress by Rep. Lionel Van Deerlin (D-Calif.), chairman of the House Communications Subcommittee. The subcommittee has just completed three days of hearings on the proposed Consumer Communications Reform Act of 1976 (see Computer, November 1976, p. 2). Joined by Rep. Lou Frey (R-Fla.), Van Deerlin said the original act is outdated.

According to the trade press, issues to be considered by the subcommittee include: whether the FCC has established fair competitive ground rules; whether business telephone services really subsidize residential services; and what the implications of changing FCC policies are toward competition.

New tax act repeals part of 1974 Privacy Act on state use of Social Security Number

President Ford last month signed into law the Tax Reform Act of 1976, recently passed by Congress, which includes an amendment permitting state governments to demand and retain an individual's Social Security Number (SSN), to aid in searches for parents not supporting their children. The amendment repeals part of the Privacy Act of 1974.

In addition, state and local governments can now use the SSN as an identifier for tax administrative programs, for drivers' licenses, and for motor vehicle registration. However, government officials who disclose the number without authorization are subject to a fine of up to $1000 or imprisonment of up to one year.

News briefs

Rep. Tim Wirth (D-Colo.) last month wrote Office of Telecommunications Policy (OTP) director Thomas Houser (who had reportedly contacted assistant attorney general Donald Baker to discuss the "economic rationale" for the government's antitrust action against AT&T) that "any further contacts between OTP and the Department of Justice, concerning the [suit] . . . would be most inappropriate."

The FCC last month set new dates for providing comments on the second "Computer Inquiry" and rulemaking regarding the use of computers by common carriers in providing communications or data processing services; comments are now due by January 10, 1976.

Responding to protests by AT&T, the FCC last month revised registration specifications for modems to facilitate direct interconnection of modems to the telephone network.

The House Government Operations Committee last month failed to report to the House floor a bill that would have authorized the Federal Assistance Program Retrieval System (FAPRS).

The Institute for Computer Sciences and Technology (ICST) of the National Bureau of Standards (NBS) last month issued Disk Drive Interface Characteristics (*-enclose $5.50); the report was prepared by Auerbach Associates under NBS contract, and deals with characteristics of the interfaces between high performance disk drives and their controllers.

The National Communications System (NCS) last month announced proposed federal standards for data communications interfaces; the proposed standards specify the general purpose electrical characteristics to be applied to data communications interfaces.

The National Science Foundation (NSF) last month said several of its staff members have been appointed to provide initial support for the Office of Science and Technology Policy (OSTP).

The first Federal Software Exchange Catalog, designed to promote the exchange and sharing of software among federal ADP units, is scheduled to be released this January by the Agency Services Division of the General Services Administration (GSA).

The Bureau of Census last month announced the availability of a 584-page report, titled Computer Programs for Demographic Analysis (*-enclose $5.50), first published last June.

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Correction to October issue

A paragraph in "Scheduling Techniques for Operating Systems" by R. B. Bunt in the October 1976 issue of Computer appeared out of order.

The second paragraph on p. 15, beginning "Among the features offered by HASP . . ." was two paragraphs too soon. It should have followed the fourth paragraph on the page, which begins "HASP was originally developed . . ." We regret the error.

Ed.
UPDATE

Continued from page 6

Chairmen, theme announced for COMPCON 77 Fall

Paul L. Hazan, a member of the senior technical staff to the director of The Johns Hopkins University Applied Physics Laboratory, has been selected as the general chairman for COMPCON 77 Fall, according to an announcement made shortly before press time by Richard E. Merwin, chairman of the COMPCON Fall Standing Committee. Named in the same announcement as program chairman was Paul S. Skartvedt, deputy project manager in TRW’s Energy Systems Division.

The topic selected for next year’s Fall COMPCON is “Micros, Minis, and Maxis: Technology Thrust vs. User Requirements” (see Call for Papers on pp. 37-40 of this issue).

“The awesome responsibility falling on the computing community is matched by the tremendous opportunities resulting from our fast-moving technology,” says general chairman Hazan. “COMPCON 77 Fall will focus on technology and requirements, opportunity and realization in our industry.”

Paul Hazan has held several top technical and executive positions in the military and commercial industries.

Over the past 20 years, he has specialized in computer applications ranging from industrial process control to airborne, surface, and subsurface applications. Prior to joining Johns Hopkins, he was technical director of The Singer Company’s Simulation Products Division in Silver Spring, Maryland. Earlier, he was a senior systems analyst with Sperry Rand.

A graduate electrical and mechanical engineer holding a BS from the Royal College of Science and Technology in the U.K., Hazan has done graduate work in computer science and computer engineering and has authored numerous papers in the computing and simulation fields. His interests range from the development and management of large-scale software systems to the networking of microprocessors.

Hazan heads the Johns Hopkins APL program in microprocessor application and education. He is the 1977 chairman of the IEEE Computer Society’s Technical Committee for Micro/Mini Computers, and is active in promoting industry, government, and IEEE interaction to help steer the direction of this critical technology. A Senior Member of the IEEE, he has held chairmanships of several national and international computer conferences, including the program chairmanship of COMPCON 76 Fall.

Paul Skartvedt has held responsible technical and management positions in the military and in industry. Over the past 10 years, he has been active in the development of advanced data systems computer applications and in systems development for command/control and communications.

Prior to joining TRW, he was with the Air Force Space and Missile System Organization concentrating his efforts in advanced systems for satellite control. At TRW he has focused on military computer applications to command and control with special emphasis on naval telecommunications system architecture. He is currently engaged in planning and analysis support to the Energy Research and Development Administration. A member of the IEEE Computer Society, he received a BS in aero engineering from the University of Washington and an MS in astronautics from the Air Force Institute of Technology.

IEEE election results tallied

The IEEE election results for president, vice-president, regions, divisions, constitutional amendments, and propositions have been announced by the Tellers Committee of the IEEE. The official results are as follows:

President—Dr. Robert M. Sanders, 21,425 votes; Irwin Feerst, 14,244 votes; and Robert A. Rivers, 13,145 votes.

Executive Vice-President—Carleton A. Bayless, 26,491 votes; Robert D. Briskman, 21,389.

Other candidates receiving the highest number of votes are:

Director Region 2—Howard B. Hamilton; Director Region 4—Burkhart H. Schneider; Director Region 6—John W. Thatcher; Region 8—E. Folke Bolinder; Division II—Donald S. Brereton; Division IV—Richard W. Damon; Division VI—Richard J. Gowen; and Regional Vice-Chairman, Region 6—Charles A. Eldon.

All three proposed constitutional amendments failed to receive the necessary number of votes to be adopted.

39 percent (19,062) of voting members voted against Proposition One to require approval by members before dues and assessments are increased, 59 percent (29,275) voted for it, and two percent (1,033) of the ballots were blank and invalid.

47 percent (22,970) of voting members voted against Proposition Two to change procedure for amending the IEEE Constitution, 50 percent (24,686) voted for it, and three percent (1,714) of the ballots were blank and invalid.

48 percent (23,686) of the members voted against Proposition Three to require approval by members before dues and assessments are increased to change member dues structure, 50 percent (24,496) voted for it, and two percent (1,188) of the ballots were blank and invalid.
Simulation Workshop scheduled at COMPCON

The IEEE Computer Society's Simulation Technical Committee has organized a special workshop in conjunction with the IEEE Computer Society's COMPCON 77 Spring, February 28-March 3, 1977, at the Jack Tar Hotel, San Francisco, Calif.

The one-day simulation workshop, which will begin at 9 a.m. on February 28, will feature a morning session, "Simulation for Systems Design," and an afternoon session, "Simulation in Biomedicine."

Dr. Richard W. Hamming, professor of computer science at the Naval Postgraduate School in Monterey, Calif., will lead the morning session; John McLeod, editor emeritus of Simulation, the publication of the Society for Computer Simulation, will head the afternoon session.

The workshop will include a presentation describing the state of the art of simulation applications, and a unique opportunity for audience participation and questioning, according to Ira M. Kay, chairman of the IEEE Computer Society's Simulation Technical Committee.

The facilitators at the workshop, according to Kay, Hamming in the morning and McLeod in the afternoon, are both resourceful experts in the field of simulation.


McLeod has spent 25 years in the field of simulation including the founding of the San Diego Symposium in Biomedical Engineering; consultant for the Presbyterian Medical Center, San Francisco; author of Physiological Automata; and the creator of PHYSBE, benchmark in physiological simulations.

The advance registration fees for the workshop are $30 for IEEE members and $40 for non-members. The registration fee includes lunch and two coffee breaks. For registration, contact the IEEE Computer Society, P.O. Box 699, Silver Spring, MD 20901.

AFIPS stages planning conference for FCC

Over 200 attendees were on hand at the offices of the FCC in Washington D.C. last month for a planning conference on regulatory policy related to computer communications. Developed and organized by an ad hoc AFIPS committee chaired by Vinton Cerf of Stanford University, the two-day meeting included presentations on the present state of the art in computer communications, current research topics, and contemporary user demands as well as commercial responses to such demands.

The conference program dealt with possible constraints—primarily regulatory and educational ones—on the development of computer communications, and included an assessment of possible future trends. Speakers in addition to Cerf were Donald Dunn of Stanford University; Alex Curran, past chairman of IFIP's Computer Communications Technical Committee and president of Bell Northern Research; Lynn Hopewell, Chairman of the IEEE Computer Society's Technical Committee on Computer Communications and senior member of the executive staff at Computer Sciences Corporation; and Keith Uncapher, chairman of the AFIPS Washington Activities Committee and director of USC's Information Sciences Institute.

A more detailed wrapup of each of the presentations will appear in Washington Update next month. The complete proceedings may be ordered from The Bookshelf (see p. 118).
Inauguration symposium held at Syracuse University

Colossus, an electronic computer built by the British Government during World War II and before the ENIAC was built, was the subject of a talk by Brian Randell of the University of Newcastle-upon-Tyne, Great Britain, before an inauguration symposium at the School of Computer and Information Science, Syracuse University, October 12-13.

Randell's talk, the concluding presentation at the two-day symposium commemorating the inauguration of the school and the tenth anniversary of the system and information science program at Syracuse University, was based primarily on interviews with people involved in the project.

The first Colossus, built in eleven months, was operational by December 1943. The early work, through 1942, used electro-mechanical machines called "Heath-Robinsons," which were slow and unreliable, according to Randell. He credited T. H. Flowers and M. H. A. Newman with the design and development of the "Colossi," a series of programmable digital electronic computers. By the time the war ended a considerable number of Colossi had been built and were being used by the government, according to Randell. He concluded that to the best of his knowledge the Colossus had no rivals or predecessors as the first programmable electronic computer.

The keynote speaker at the symposium was Carl T. Rowan, syndicated columnist for the Chicago Daily News. Rowan's presentation "Is the Computer a Threat to Personal Freedom?" was given at a banquet held at the Hotel Syracuse.

ATLAS Test Language approved as IEEE standard


ATLAS (Abbreviated Test Language for All Systems) is a standardized language for expressing test specifications and procedures. It provides a standard abbreviated English language used in the preparation and documentation of test procedures which can be implemented either manually or with automatic or semiautomatic equipment.

Under development for nearly a decade under the auspices of Aeronautical Radio, Inc., ATLAS has gained widespread acceptance throughout the avionics industry. Although originally created for use by AEEC (Airlines Electronic Engineering Committee), during recent years ATLAS has been introduced in numerous military applications and was recently designated as an interim standard for automatic test equipment by the U.S. Department of Defense.

The new ATLAS standard is expected to be the software counterpart of existing IEEE instrumentation system standards. The past year has seen the publication of IEEE Std 488-1975 (Standard Digital Interface for Programmable Instrumentation) and IEEE Std 583-1975 (Standard Modular Instrumentation and Digital Interface System (CAMAC)]. IEEE Std 488-1975 and IEEE Std 583-1975 provide a data bus with a standard electrical interface to transfer data among a group of instruments and devices. ATLAS now provides a standard software interface which expedites the translation from test specification to test programming and reduces the system software necessary to operate the test station.


Personal computing featured during 1977 NCC

A major program on personal computing is being planned as part of the 1977 National Computer Conference, June 13-16 in Dallas, Texas. Included will be a "personal computing fair," an exhibit of personal computing products, plus two full days of papers, panels, and workshop presentations.

"Personal computing is becoming a widespread avocation thanks to the relatively low cost and tremendous computing power now being made available through advances in microprocessors," stated '77 NCC conference chairman Dr. Portia Isaacson, assistant professor of mathematical sciences at the University of Texas at Dallas. "Computer hobbyists are doing fantastic things with their 'home-grown' microprocessor-based computers. The trend is spreading outside the immediate domain of personal computing and is creating a tremendous market for products and services to assist not only the hobbyists but small businesses as well. It is my intention to create a national forum on personal computing where hobbyists and others can exchange new ideas and at the same time view the latest offerings from suppliers that cater to the personal computing market."

For information on participating in the fair, contact Harold A. Mauch, PerCom Data Company, 4021 Windsor, Garland, Texas 75042.
Data communications developments discussed at ADAPSO meeting

The computer services industry has traditionally utilized data communications as a distribution vehicle, but new types of data communications services, spawned by significant regulatory policy changes, are now providing and utilizing intelligent data communication networks for multiple purposes, according to Dr. Dixon R. Doll, president of DMW Telecommunications Corp.

In a speech before the ADAPSO Third Annual Financial Analyst Meeting, September 30, New York City, Doll said, "In addition to traditional computer service activities firms may also resell excess network capacity to customers through regulated common-carrier subsidiaries." Doll said that the unclear policy with respect to tariff provisions has held back companies from joint usage of standard voice grade lines, and in turn, a savings in network expenses, but for the last few years, Tymshare Corp. has taken advantage of the tariff provision.

The availability of intelligent network services, such as from value-added carriers as Telenet Communications Corp. and Tymnet, is bringing together potential buyers and sellers of application packages and data bases, but Doll added, "The future is clouded with respect to the ultimate position of value-added common carriers (see Computer, November 1976, p. 104)."

The Bell System policy of placing tariffs on local calls based on their holding times will result in a 50-300 percent increase in the cost of local message unit charges for end-users. Typical prices for local call connect time will range from 83-5/hour, according to Doll. Alternatives (short distance leased line connections or sharing of facilities) may offer slightly less cost but will decrease flexibility.

Doll said that the long range alternatives for computer services will include use of satellite transmissions, which will ultimately allow different computers to talk directly to each other without intervening processing.

Doll concluded, "The once heralded benefits promised by the specialized common carriers have generally failed to materialize according to original expectations, evidenced by the recent demise of Datran. Users nonetheless have a strong interest in supporting and utilizing competitive alternatives to the Bell System. Computer services firms will continue to have strong needs for the capability to distribute their product with ease and flexibility at reasonable cost. . . . The future is an optimistic one, but only if these numerous storm clouds on the horizon blow over without leaving a devastated industry in their wake."

Society membership beneficial

Participation in professional societies is important to the individual, the company, and the future of the aerospace industry, according to TRW Defense and Space Systems officials in Redondo Beach, Calif. Company officials have been urging employees at the facility to obtain membership in professional societies, and to take advantage of the benefits that societies provide.

According to Dr. R. D. DeLauer, TRW vice-president, "At a time when there exists a widespread disenchantment with technology and the benefits of science in our nation, it is especially important for us to maintain the strength and vitality of the organizations that represent our industry and our professional disciplines. Professional societies have proven they can be effective spokesmen for our industry (through the press, before Congress, and in getting our story to the people)."

Software management X-rated? Recent AIAA software management conferences on the East and West Coasts turned out big crowds. As this marquee suggests, perhaps X-rated software has a major draw even at conference prices considerably higher than local porno theaters. Reliable sources indicated, however, that some software managers had taken umbrage at the conference subtitle ("The Story of O") as being an unduly pessimistic view of the state of software management today. (Photo courtesy Al Salisbury)

Dr. Hermann Roemmich (left), professor of counseling and testing at California State University, San Diego, received a special award for meritorious service from the ICCP. Called the father of computer certification for his pioneer work in designing the first certification examination in 1961, Roemmich received his award from Coleman Furr, CDP, president of Coleman College and an ICCP board member.

Roemmich honored at certification dinner

Dr. Hermann Roemmich, professor of counseling and testing at California State University, San Diego, received a special award for meritorious service September 22, in San Diego, Calif., before more than 200 friends and computer colleagues at a dinner meeting of the Institute for Certification of Computer Professionals (ICCP).

Master of ceremonies for the event was Coleman Furr, CDP, president of Coleman College and an ICCP board member. Keynote speaker was Professor William Horne, CDP, of Boston College, chairman of ICCP's Certification Council. The council is a body of appointed DP professionals and CDP holders which is responsible for evaluation and revision of the CDP examination contents on a continuing basis.

In his address entitled "Certification—Past, Present and Future," Horne examined the certification concept at its inception, discussed its contemporay significance, and projected the future role of certification in the DP industry. In tracing the origins of certification, Horne paid special tribute to Roemmich's professionalism and insight in launching the first certification examination.

Called the father of computer certification for his pioneer work in designing the first certification examination in 1961, Roemmich remained a test consultant to the examination until 1975, when the psychometric aspect of the test was taken over by Psychological Corporation.
End of computer era “as we know it” seen

The end is in sight for the computer as we know it today, according to Dr. George Mueller, chairman and president of System Development Corporation (SDC) of Santa Monica, Calif.

Mueller made the prediction in a keynote speech, “What’s Ahead for Data Base Systems?” prepared for the American Institute of Industrial Engineers’ (AIIE) On-Line Systems and Data Base Systems Conference, October 18–22 at the Jack Tar Hotel, San Francisco, Calif.

“Most of today’s computers,” he said, “will be replaced by quite different machines, machines that will make today’s number crunching computing systems as obsolete as the dinosaur.

The reason, according to Mueller, is that today’s machines were designed for a different job than the one they’re doing.

Computers today “are wonderfully efficient at performing complex mathematical calculations, but they are woefully deficient at all those storing, sorting, and fetching operations for which they are actually widely used today,” he said. In fact, Mueller said, 90 percent of today’s computer tasks are storing, sorting, and fetching—not the math for which they were designed. Mueller said, “the computer industry has gone through three generations of development to perfect machines optimized for 10 percent of the workload.”

So the computer that is a mathematical genius will give way to new machines that can simply “query a database and get a specific answer as quickly and cheaply as possible,” he said.

Mueller said that electronic storage requirements—the filing of information by a computer system, and the quick retrieval of any part of it—“may well double before 1980.” And, he added, “we simply won’t be able to meet these growing demands by making our number crunching computers bigger and faster.”

What’s ahead, he said, “may still be called computers, out of habit, but they will be very different from the computers we know today.” He predicted two kinds of machines, “The workhorse machine will handle all the data base management functions that will so predominate. The few percent of the tasks requiring complicated calculations will be handled by stripped-down versions of today’s computers.”

The development of the new machines will require “a brand new architecture, better mass storage hardware, and better security and privacy systems,” according to Mueller. They will be usable by clerks, not programmers, he said, and the clerks “should be able to enter a request in free-form English without resorting to special key words or special symbols. The system should not even demand that the clerk spell correctly.”

Proposed ANSI Fortran standard available

The draft proposal of the American National Standard Fortran, published as the March 1976 issue of ACM SIGPLAN Notices, is available at $5, prepaid, from the ACM Order Department, P.O. Box 12105, Church Street Station, New York, NY 10249.

The proposed standard, developed by the ANSI Committee X3J3, consists of a full language and a subset language as a revision of X3.9-1966 Fortran. The Committee has recommended withdrawal of X3.10-1966 Basic Fortran.

Based on comments received by the Committee, the proposed standard will be revised as necessary and submitted to the ANSI Committee X3 for letter ballot and final approval, according to an ACM spokesperson.

Horsepower demand up for small business computer

Just as Americans in the 1960s wanted more horsepower under the hood, the small businessman of the ’70s wants more horsepower from his computer, according to Raymond P. Kurshan, chairman and president of Management Assistance, Inc. (MAI).

Kurshan, speaking to a group of stock analysts at a recent WEMA conference, predicted that the minicomputer market will sustain a healthy growth rate for the foreseeable future.

“Interestingly,” he said, “we’ve found that the small businessman is in many ways more sophisticated than the Fortune 500 firms when it comes to minicomputers. They are more flexible and more adventurous in exploring new applications and this has prompted the need for more ‘horsepower.’

“Moreover, big organizations with huge data processing centers are often locked into expensive equipment selected and operated by high priced talent. Most small to medium size companies operate with the same, or even smaller, clerical staffs as they had before computerizing. And we have found these people will experiment and devise new uses for the equipment, because they are not bound by rigid rules and regulations,” he said.

In addition to this interest of smaller companies, many larger companies are now devoting attention to the use of small business computers for two primary reasons, according to Kurshan.

First, is a trend toward decentralization. In a company with a number of branches, for example, each manager could have his own computer terminal, making it possible to get information from the computer tailored to his specific needs.

The second reason is the real-time, on-line capabilities of minicomputers.

In addition to the demand among both smaller and larger firms for increased capability, Kurshan contends that the small business computer industry will thrive because the minicomputer is the foundation of the much talked about “office of the future,” a combination of data processing, word processing, and facsimile transmission in one efficient, low-cost network with the minicomputer system as the hub.

1976 MUMPS applications reviewed at Users’ Group meeting

The fifth MUMPS Users’ Group (MUG) Meeting was held on September 29 through October 1, 1976 in Madison, Wisconsin. The meeting presented interactive applications using the MUMPS computer language.

An introductory tutorial on MUMPS programming attended by administrators, physicians, and programmers; a tutorial and a workshop on advanced MUMPS techniques; workshops on such topics as computer-aided instruction and MUMPS application transfer; and a vendors’ forum, attended by seven vendors of MUMPS applications and implementations were featured. Two of the vendors that exhibited at the meeting (Artronix, Inc. and Digital Equipment Corporation) announced their completion of implementations of the NBS-defined Standard MUMPS which is now seeking approval as an ANSI Standard.

For information on MUMPS, future MUG meetings, and MUMPS applications, contact the MUG Executive Secretary, Dr. Joan Zimmerman, Biomedical Computer Laboratory, 700 S. Euclid Ave., St. Louis, MO 63110.
Lower prices/more capability to mark CRT growth

The value of worldwide CRT terminal shipments is projected to grow at an average of 5.6 percent per year rate for the remainder of the decade, rising from $402.7 million in 1974, to $557 million in 1980. Unit shipments, however, will grow twice as fast, rising from 119,000 units in 1974 to 221,000 units in 1980, an average increase of 10.9 percent per year. The average cost per unit, therefore, will be lower, according to a study of Alphanumeric and Graphic CRT Terminals, 1975-1980, completed by Venture Development Corporation of Wellesley, Mass.

The VDC researchers expect the reduction in the average cost of CRT terminals to be accompanied by a substantial increase in their capability. For example, VDC estimates that 46 percent of CRT’s installed by 1980 will contain some form of microprocessor, as opposed to only 9 percent of all units installed at the beginning of 1975.

The VDC researchers believe that the most important factors influencing the CRT market in the next five years are the volume of computer and time-sharing shipments, subsystem price trends (e.g., displays, memories), AT&T’s policies regarding line usage, and the timing of the next generation to replace IBM’s 3270. VDC expects solid growth in the markets for teleprinter and Teletype Model 40 replacements, for mainframe-supplied displays, and for independent systems.

Process control market to reach $4 billion by 1980

Even though industry is cautious about becoming fully automated, it spent $3 billion on process control equipment last year, according to Creative Strategies Inc., in its study on industrial automation. CSI forecasts the market growth for U.S. manufactured equipment at a compound annual rate of 15 percent per year through 1980. Shipments by U.S. suppliers will grow from the current level of $1.96 billion to $4.03 billion by 1980.

This growth will be driven by pressure to increase productivity and a growing recognition that automatic control can help accomplish this. Growth in international markets will be faster than in U.S. markets as foreign manufacturers try to catch up to the U.S. in productivity. By 1980 international markets will represent 48 percent of the total demand. Also contributing to the expanding use of process control equipment, according to CSI, is the part that automatic process control can play in energy conservation and pollution abatement.

According to CSI, high purchase, installation, and programming costs are secondary considerations in determining whether or not to install a process control system. The threat of system failure, which could feasibly cause a plant to completely shut down, is the main reason industrial automation is not always implemented.

CSI’s study on process control equipment has been published as one of a series of reports on high technology industries. For further details contact Creative Strategies Inc., 4340 Stevens Creek Blvd., Suite 275, San Jose, CA 95129.

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Compiler Development Specialist

Join this team of unusually sharp, forward-thinking computer professionals involved in developing highly sophisticated control systems.

Position requires an astute professional who can make significant contributions to a six man-year project that will implement a chemical engineering process evaluation system. Success will lead to further involvement in the development of other high level languages for industrial automation.

Credentials should include an advanced degree in Computer Science, with specialization in compiler theory, and in-depth experience in high level language design. Working knowledge of CDC 6000 series and/or background in any physical science would be to your favor.

Position is based in a pleasant New Jersey location offering choice of urban or suburban living, and offers compensation fully commensurate with capabilities and assigned responsibilities. Please write in confidence to Mrs. G. Millsom, M/C 116-C. 

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